

**Notice of Allowability**

Application No.

09/918,734

Examiner

Russell L. Guill

Applicant(s)

JAIN ET AL.

Art Unit

2123

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed December 5, 2005.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Nick Johns on January 24, 2006.
3. The application has been amended as follows:
  - a. Claim 6, line 3, the word "task" has been replaced with the word --multiple--.
  - b. Claim 7, line 3, the word "task" has been replaced with the word --multiple--.
  - c. Claim 8, line 17, the word "ever" has been replaced with the word --every--.
  - d. Claim 13, line 3, the word "task" has been replaced with the word --multiple--.
  - e. Claim 14, line 3, the word "task" has been replaced with the word --multiple--.
4. **Claims 1 - 14** are allowed.
5. The following is a statement of reasons for allowance:
  - a. **Regarding claim 1**, while Dave (U.S. Patent Number 6,289,488) and Markov (U.S. Patent Number 6,305,006) and Kalavade (Kalavade, Asawaree; and Subrahmanyam, P. A.; "Hardware/Software Partitioning for Multifunction Systems", September 1998, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems) disclose a method for generating computer system level architectures that are capable of executing multiple functional

specifications, given a set of physical resources and subject to a set of design constraints, neither of these references taken either alone or in combination with the prior art of record disclose a method for generating computer system level architectures including specifically: forming an initial task graph from said multiple specifications, said initial master task graph including at least one hierarchical task having pointers to a plurality of sub-task graphs, wherein an XOR relationship exists between at least two of the plurality of sub-task graphs; processing said initial master task graph to provide a selected number of final master task graphs comprising a list of AND task graphs; in combination with the remaining elements and features of the claimed invention. It is for these reasons that the Applicant's invention defines over the prior art of record.

b. **Regarding claim 8**, while Dave (U.S. Patent Number 6,289,488) and Markov (U.S. Patent Number 6,305,006) and Kalavade (Kalavade, Asawaree; and Subrahmanyam, P. A.; "Hardware/Software Partitioning for Multifunction Systems", September 1998, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems) disclose an article of manufacture for generating system level architectures that are capable of executing multiple functional specifications, given a set of physical resources and subject to a set of design constraints, neither of these references taken either alone or in combination with the prior art of record disclose an article of manufacture for generating system level architectures including specifically: form an initial task graph from said multiple specifications, said initial master task graph including at least one hierarchical task having pointers to a plurality of sub-task graphs, wherein an XOR relationship exists between at least two of the plurality of sub-task graphs; process said initial master task graph to provide a selected number of final master task graphs comprising a list of AND task graphs; in combination

with the remaining elements and features of the claimed invention. It is for these reasons that the Applicant's invention defines over the prior art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

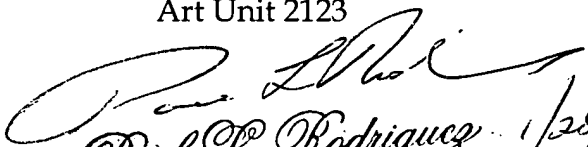
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday - Friday 10:00 AM - 6:30 PM.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Russ Guill  
Examiner  
Art Unit 2123

  
Paul L. Rodriguez 1/28/06  
Primary Examiner  
Art Unit 2125